

PLATE 2.

The Pan-Pacific Entomologist

Vol. V, No. 2

October, 1928

NEW EUPHYDRYAS (LEPID., RHOPALOCERA)

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Euphydryas monoensis Gunder, sp. nov. Fig. A

Allied to the baroni (Edw.) and editha (Bdv.) group in arrangement of maculation and wing shape, however they are much nearer to editha. Generally smaller and of a more faded orange-red color instead of a brick red. Very constant as to distribution of red pattern, and cream spots always a cream color, never shading to white as does editha. All interior cream spots and lunate marginal cream spots fuller or broadened. First submarginal row of cream spots on upper side primaries always complete clear up to costal margin; this is not always the case with editha. Under sides more delicate and less heavily patterned than in editha. Genitalia: upper or dorsal hook of uncus smaller and more widespread from opposite projection than in editha. Shape of harpe similar, but constantly broader.

Classification: Superficially similar to editha, but equivalent to a separate species, being far away from similar species on the desert side of the Sierras.

Data: (Halftone figures enlarged). Holotype &, expanse 35 mm. (average 33 to 38 mm.); allotype &, expanse 38 mm. (average 37 to 42 mm.), June 14, 1926, Rush Creek (below Farmington's ranch), near Mono Lake, Mono County, California. Types in author's collection. Ten pairs of paratypes. One pair deposited in Can. Nat. Collection, Ottawa, Canada. One pair deposited in Barnes' collection, Decatur, Illinois. One pair made from a series in the George Malcolm collection, Los Angeles, from typical examples taken on Levining Creek, near type habitat and dated July 13, 1927.

Euphydryas aurilacus Gunder, race nov. Fig. B

Differs from nubigena (Behr) Tuolumne Meadows, Yosemite, specimens, of which it is a race, in being much larger and having outer half of upper side secondaries always a dark red, uncut by any submarginal row of white spots and only showing black line maculation. The upper side of primaries also lack first submarginal row of lunate whitish spots. The wing shapes are not those of rubicunda (Hy. Edw.), as rubicunda is closer to the baroni (Edw.) group.

Regarding genitalia this new race differs from nubigena in having a larger, yet more slender left projection on the uncus which is less barbed at its termination. A male example (half fig.) of this race is illustrated in color as fig. dd on pl. 2 in May, 1924, Entomological News.

Classification: a race of nubigena (Behr).

Data: (Halftone figures enlarged). Holotype &, expanse 37 mm. (average 34 to 38 mm.); allotype Q, expanse 45 mm. (average 42 to 46 mm.), July 15, 1925, near Gold Lake Camp, Gold Lake, Sierra County, California. Types in author's collection. Six pairs of paratypes. One pair deposited in Can. Nat. Collection, Ottawa, Canada. One pair deposited in Barnes' collection, Decatur, Illinois.

Note: Comstock in "Butterflies of California" illustrates in color a & and 9 from this same lot. Pl. 34, figs. 11 and 12 only. I designate these as paratypes also.

Euphydryas wallacensis Gunder, race nov. Fig. C

These specimens deserve a racial name equivalent to race colon (Edw.) or race perdiccas (Edw.). They approach colon much more in appearance, however, but are smaller in size and have the marginal rows of red spots generally complete in both sexes. Differs from perdiccas (western Washington and B. C. examples) in always having a clear black stripe, clear of red spots or semblance of lighter spotting, external to the discal area larger white spots. Also they are of a darker velvety-black shade than perdiccas specimens. Local form paradoxa McD. of perdiccas, I understand always has a submarginal row of red spots running through this black stripe as mentioned above. The genitalia of this race (the projections of the uncus) approach the anicia beani group, but of course the specimens themselves look like smaller colon. The genitalia of colon looks considerably different. This race probably represents a connecting link as Dr. McDunnough has suggested.

Classification: a race of chalcedona probably evolved from the colon stem.

Data: (Halftone figures enlarged). Holotype &, expanse 40 mm. (average 38 to 42 mm.); allotype &, expanse 45 mm. (average 43 to 45 mm.), May 29, 1921, Wallace, Idaho. Types in author's collection. Twenty pairs of paratypes. One pair deposited in the Can. Nat. Collection, Ottawa, Canada. One pair deposited in the Barnes collection, Decatur, Illinois.

Note: Comstock described tr. f. huellemanni as a Euphydryas colon (Edw.) transition form. These specimens can now be listed under this new name, as they are from this type locality.